

**U.S. Pat. Appl. Ser. No. 10/579,255
Attorney Docket No. 10191/4205
Supplemental Reply to Final Office Action of October 8, 2008**

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-4. (Canceled).

5. (Currently Amended) A radar sensor utilizing the pulse-echo principle, comprising:
a first receiving antenna;

a second receiving antenna having a narrower and longer range of coverage area than
that of the first receiving antenna; and

a switch coupled to the first and second receiving antennas, wherein the switch
alternatingly switches through a received signal of the first receiving antenna and a received
signal of the second receiving antenna at a pulse repetition frequency of radar pulses
transmitted by a transmitting antenna.

6. (Currently Amended) The radar sensor as recited in Claim 5, wherein the switching
takes place only within a scanning distance range corresponding to the shorter range of the
first receiving antenna.

7. (Currently Amended) A radar system, comprising:

at least two radar sensors, each radar sensor including:

 a first receiving antenna having a range of coverage area;
 a second receiving antenna having a narrower and longer ~~narrow long~~
~~range of coverage area than~~ compared to the range of the first receiving
antenna, the range of the first receiving antenna being a broader and shorter
~~broad short range than~~ compared to the range of the second receiving antenna;
and

 a switch coupled to the first and second receiving antennas, wherein
the switch alternatingly switches through a received signal of the first
receiving antenna and a received signal of the second receiving antenna at a
pulse repetition frequency of radar pulses transmitted by a transmitting
antenna;

 wherein a mono-pulse target angle determination is achieved using one of the radar
sensors in the [[short]] range of the first receiving antenna of the one of the radar sensors by
superimposing the [[short]] range of the first receiving antenna of the one of the radar sensors
and the [[long]] range of the second receiving antenna of the one of the radar sensors, and
wherein a target angle determination is achieved in a range longer than the [[short]] range of
the first receiving antenna of the one of the radar sensors by triangulation using the at least
two radar sensors.

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8. (Currently Amended) A radar system, comprising:
 - at least two radar sensors, each radar sensor including:
 - a first receiving antenna having a range of coverage area;
 - a second receiving antenna having a narrower and longer narrow long range of coverage area than compared to the range of the first receiving antenna, the range of the first receiving antenna being a broader and shorter broad short range than compared to the range of the second receiving antenna; and
 - a switch coupled to the first and second receiving antennas, wherein the switch alternately switches through a received signal of the first receiving antenna and a received signal of the second receiving antenna at a pulse repetition frequency of radar pulses transmitted by a transmitting antenna, and wherein the switching takes place only within a scanning distance range corresponding to the [[short]] range of the first receiving antenna;
 - wherein a mono-pulse target angle determination is achieved using one of the radar sensors in the [[short]] range of the first receiving antenna of the one of the radar sensors by superimposing the [[short]] range of the first receiving antenna of the one of the radar sensors and the [[long]] range of the second receiving antenna of the one of the radar sensors, and wherein a target angle determination is achieved in a range longer than the [[short]] range of the first receiving antenna of the one of the radar sensors by triangulation using the at least two radar sensors.
9. (Previously Presented) The radar system as recited in Claim 7, wherein a calibration of the at least two radar sensors is achieved by obtaining redundant information in overlapping coverage areas of the first antenna of a first sensor, the second antenna of the first sensor, the first antenna of a second sensor, and the second antenna of the second sensor.
10. (Previously Presented) The radar system as recited in Claim 8, wherein a calibration of the at least two radar sensors is achieved by obtaining redundant information in overlapping coverage areas of the first antenna of a first sensor, the second antenna of the first sensor, the first antenna of a second sensor, and the second antenna of the second sensor.